

AMENDMENT UNDER 37 C.F.R. § 1.111

Application Number: 10/694,724

Attorney Docket Number: Q78154

### **REMARKS**

Claims 1-8 are all the claims pending in the application. Claims 1,5, and 6 have been amended to correct minor grammatical errors.

The Abstract has been amended to amend legal phraseology, such as “disclose” and “comprise,” to narrative form.

The specification has been amended to correctly use the trademark TETRALIN®.

Therefore, no new matter has been added.

#### **I. Specification**

The abstract of disclosure has been objected to, allegedly because of legal phraseology such as “discloses” and “comprising.” Applicants have amended to abstract of disclosure by amending the word “[d]isclosed” to “[t]he present invention provides” and by amending the word “comprising” to “including.”

Reconsideration and withdrawal are respectfully requested.

#### **II. Claim Objections**

Claims 1 and 5 have been objected to, allegedly because they contain more than one sentence. Applicants have amended Claims 1 and 5 so that each begins with a capital letter and ends with a period.

Reconsideration and withdrawal are respectfully requested.

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**III. Claim Rejections - 35 U.S.C. § 112, second paragraph**

Claims 6 and 8 have been rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite.

Claim 6 has been amended to recite 1,2,3,4-tetrahydronaphthalene instead of “tetralin.”

In this regard, Claims 6 and 8 no longer refer to the trademark name TETRALIN®.

Reconsideration and withdrawal are respectfully requested.

**IV. Claim Rejections - 35 U.S.C. § 103**

Claims 1-5 and 7-8 have been rejected under 35 U.S.C. § 103, as allegedly being unpatentable over U.S. Published Application No. 2002/0004546 to Ohkawa, *et al.* (“Ohkawa ‘546”) in view of U.S. Published Application No. 2004/0053064 to Masuda, *et al.* (“Masuda ‘064”).

Additionally, Claim 6 has been rejected under 35 U.S.C. § 103, as allegedly being unpatentable over Ohkawa ‘546 in view of Masuda ‘064 as applied to Claims 1-5 and 7-8 above, and further in view of U.S. Patent No. 6,384,122 to Hirakawa *et al.* (“Hirakwa ‘122”) and U.S. Patent No. 5,667,872 to Ohno *et al.* (“Ohno ‘872”).

Applicants respectfully traverse these rejections.

Ohkawa ‘546 is deficient in that it fails to teach that its thermoplastic resin composition contains (E) a resin characterized by that, with respect to the swelling ratio measured at 220°C at an L/D of an orifice of 40, the ratio of a swelling ratio ( $SR_{10^3}$ ) at a shear rate of  $2.4 \times 10^3 \text{ sec}^{-1}$  to a swelling ratio ( $SR_{10^2}$ ) at a shear rate of  $1.2 \times 10^2 \text{ sec}^{-1}$ ,  $SR_{10^3}/SR_{10^2}$ , is from 1.0 to 1.1.

Masuda '064 is relied upon to make up for this deficiency. Masuda '064 teaches that its biaxially stretched polypropylene uses a HMS-PP, such as PF-814, the melt strength of which is increased by introducing long chain branches into polypropylene molecules. *See*, paragraph [0023].

A person of ordinary skill in the art would not have been motivated to combine the teachings in Ohkawa '546 with the teachings of Masuda '064. Ohkawa '546 teaches a thermoplastic resin composition that contains elastomer of 10 to 35 wt %. *See*, Abstract. In contrast, Masuda '064 fails to teach that its biaxially stretched polypropylene contains an elastomer. As a result, Masuda '064 teaches that the HMS-PP increases the melt strength of a polypropylene film, where the biaxially stretched polypropylene has no elastomer. Masuda '064 fails to teach that the PF-814 increases the melt strength of a polypropylene film, where the biaxially stretched propylene contains an elastomer in an amount of 10 to 35 wt %. A person of ordinary skill in the art would have appreciated that the physical properties of a thermoplastic resin having 10 to 35 wt % of an elastomer are different from those of a propylene composition having less than 10 wt %. In this regard, a person of ordinary skill in the art would not have been motivated to add PF-814 to the thermoplastic resin disclosed in Masuda '814 for the purpose of increasing melt strength.

Further, both Ohkawa '546 and Masuda '064 fail to teach or suggest that PF-814 can provide for an apparent improvement in appearance. As evidenced by the comparison of Examples 1 and 2 and Comparative Example 1 in Applicants' specification, an apparent improvement in appearance can be provided by the addition of (E) a resin that, with respect to

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the swelling ratio measured at 220°C at an L/D of an orifice of 40, the ratio of a swelling ratio (SR10<sup>3</sup>) at a shear rate of  $2.4 \times 10^3 \text{ sec}^{-1}$  to a swelling ratio (SR10<sup>2</sup>) at a shear rate of  $1.2 \times 10^2 \text{ sec}^{-1}$ , SR10<sup>3</sup>/SR10<sup>2</sup>, is from 1.0 to 1.1. As such, a person of ordinary skill in the art would not have been motivated to add PF-814 to the thermoplastic resin disclosed in Ohkawa '546.

Claims 2-5 and 7-8 depend directly or indirectly from Claim 1. Therefore, Claims 2-5 and 7-8 are patentable for at least the same reasons as Claim 1.

With respect to Claim 6, Applicants respectfully submit that Hirakawa '122 and Ohno '872 fail to teach or suggest adding PF-814 into the thermoplastic resin disclosed in Ohkawa '546. In this regard, Hirakawa '122 and Ohno '872 fail to make up for the deficiency in Ohkawa '546.

Reconsideration and withdrawal are respectfully requested.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.


Respectfully submitted,

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